

WHAT IS CLAIMED IS:

- 1           1.     A method for implementing security features at a portal server,  
2 comprising:  
3           receiving a first request from a client;  
4           in response to receiving the first request, authenticating the client;  
5           consulting a database to determine access privileges of the authenticated client for  
6 interactions with a plurality of applications, wherein the applications are located at  
7 backend servers;  
8           generating code containing selectable interactions with the applications, wherein  
9 any authentication for the selectable interactions can be performed within the portal  
10 server; and  
11          sending the code to the client.
- 1           2.     The method of claim 1, further comprising:  
2           responsive to sending the code to the client, receiving a second request from the  
3 client, wherein the second request contains a selection of at least one of the selectable  
4 interactions;  
5           determining from the selection a set of backend servers to process the second  
6 request;  
7           forwarding the second request to the set of backend servers;  
8           receiving results corresponding to the request from applications executing on the  
9 backend servers; and  
10          sending the results to the client.

- 1           3.     The method of claim 2, wherein sending the results to the client further  
2 comprises:  
3           generating further selectable interactions; and  
4           sending the further selectable interactions with the results to the client.
- 1           4.     The method of claim 1, wherein the portal server is a Web server and the  
2 portal server comprises a portal application.
- 1           5.     The method of claim 1, wherein the database comprises a plurality of  
2 generic objects, wherein each generic object contains the access privileges related to a  
3 user for the elements of the plurality of applications.
- 1           6.     The method of claim 5, wherein the access privileges indicate write access.
- 1           7.     The method of claim 5, wherein the database is in the form of a table.
- 1           8.     The method of claim 1 wherein the code is in a form that can be rendered  
2 into a Web page.
- 1           9.     The method of claim 8, wherein the form of the code is comprised of  
2 active code, wherein the active code can be executed on the client.
- 1           10.    The method of claim 1, wherein the selectable interactions correspond to  
2 operations within the applications.
- 1           11.    The method of claim 1, wherein the selectable interactions correspond to  
2 resources related to the applications.

1           12.    The method of claim 11, wherein the resources are selected from the group  
2   consisting of multimedia content, objects, files, attributes of objects, program elements,  
3   database objects, table entries.

1           13.    A method at a backend system for securely making available a backend  
2   application, comprising:  
3           creating data structures corresponding to interactions with the backend  
4   application;  
5           associating privileges for each of the data structures, wherein the privileges can be  
6   fully checked at a portal application separately hosted from the backend application;  
7           receiving a request from the portal application for reading the data structures; and  
8           sending the data structures to the portal application.

1           14.    The method of claim 13, further comprising:  
2           receiving a request for an interaction with the backend application from the portal  
3   application;  
4           processing the request without checking for the privileges; and  
5           sending the results of processing the request to the portal server.

1           15.    The method of claim 13, wherein the data structures are data objects.

1           16.    The method of claim 13, wherein a representation of the data structure is  
2   from the group consisting of a relational database, an XML document and a class.

1           17.    The method of claim 13, wherein the interactions are operations that can  
2   be performed on the backend application.

1           18.    The method of claim 13, wherein the interactions relate to resources  
2   associated with the background application.

1           19.    A method for accessing a group of applications at a client computer  
2 comprising:  
3            authenticating with a portal server;  
4            receiving a list of applications and interactions that can be performed with the  
5 applications from the portal server, wherein the applications are stored at backend servers  
6 that are different from the portal server;  
7            selecting an interaction; and  
8            receiving results based on the selection of the interaction without authenticating  
9 with the backend servers.

1           20.    The method of claim 19, wherein receiving the results further comprises  
2 receiving a set of further interactions selectable by the client.

1           21.    The method of claim 19, wherein authenticating, receiving the list,  
2 selecting, and receiving results are at a Web browser.

1           22.    A system for implementing security features, comprising:  
2 a portal server;  
3 means for receiving a first request from a client at the portal server;  
4 means for authenticating the client, in response to receiving the first request;  
5 means for consulting a database to determine access privileges of the  
6 authenticated client for interactions with a plurality of applications, wherein the  
7 applications are located at backend servers;  
8 means for generating code containing selectable interactions with the applications,  
9 wherein any authentication for the selectable interactions can be performed within the  
10 portal server; and  
11 means for sending the code to the client.

1           23.    The system of claim 22, further comprising:  
2                means for receiving a second request from the client in response to sending the  
3 code to the client, wherein the second request contains a selection of at least one of the  
4 selectable interactions;  
5                means for determining from the selection a set of backend servers to process the  
6 second request;  
7                means for forwarding the second request to the set of backend servers;  
8                means for receiving results corresponding to the request from applications  
9 executing on the backend servers; and  
10              means for sending the results to the client.

1           24.    The system of claim 23, wherein the means for sending the results to the  
2 client further performs:  
3                generating further selectable interactions; and  
4                sending the further selectable interactions with the results to the client.

1           25.    The system of claim 22, wherein the database comprises a plurality of  
2 generic objects, wherein each generic object contains the access privileges related to a  
3 user for the elements of the plurality of applications.

1           26.    A system for securely making available a backend application, comprising:  
2                a backend system hosting the backend application;  
3                means for creating data structures at the backend system corresponding to  
4 interactions with the backend application;  
5                means for associating privileges for each of the data structures, wherein the  
6 privileges can be fully checked at a portal application separately hosted from the backend  
7 application;  
8                means for receiving a request from the portal application for reading the data  
9 structures; and  
10              means for sending the data structures to the portal application.

1           27.    The system of claim 26, further comprising:  
2                means for receiving a request for an interaction with the backend application from  
3   the portal application;  
4                means for processing the request without checking for the privileges; and  
5                means for sending the results of processing the request to the portal server.

1           28.    A system for accessing a group of applications comprising:  
2                a client computer;  
3                means for authenticating with a portal server from the client computer;  
4                means for receiving a list of applications and interactions that can be performed  
5   with the applications from the portal server, wherein the applications are stored at  
6   backend servers that are different from the portal server;  
7                means for selecting an interaction; and  
8                means for receiving results based on the selection of the interaction without  
9   authenticating with the backend servers.

1           29.    The system of claim 28, wherein the means for receiving the results further  
2   performs receiving a set of further interactions selectable by the client.

1           30.    An article of manufacture including code for implementing security  
2 features at a portal server, wherein the code is capable of causing operations, the  
3 operations comprising:  
4           receiving a first request from a client;  
5           in response to receiving the first request, authenticating the client;  
6           consulting a database to determine access privileges of the authenticated client for  
7 interactions with a plurality of applications, wherein the applications are located at  
8 backend servers;  
9           generating code containing selectable interactions with the applications, wherein  
10 any authentication for the selectable interactions can be performed within the portal  
11 server; and  
12           sending the code to the client.

1           31.    The article of manufacture of claim 30, further comprising:  
2           responsive to sending the code to the client, receiving a second request from the  
3 client, wherein the second request contains a selection of at least one of the selectable  
4 interactions;  
5           determining from the selection a set of backend servers to process the second  
6 request;  
7           forwarding the second request to the set of backend servers;  
8           receiving results corresponding to the request from applications executing on the  
9 backend servers; and  
10           sending the results to the client.

1           32.    The article of manufacture of claim 31, wherein sending the results to the  
2 client further comprises:  
3           generating further selectable interactions; and  
4           sending the further selectable interactions with the results to the client.

1           33.    The article of manufacture of claim 30, wherein the portal server is a Web  
2 server and the portal server comprises a portal application.

1           34.    The article of manufacture of claim 30, wherein the database comprises a  
2 plurality of generic objects, wherein each generic object contains the access privileges  
3 related to a user for the elements of the plurality of applications.

1           35.    The article of manufacture of claim 34, wherein the access privileges  
2 indicate write access.

1           36.    The article of manufacture of claim 34, wherein the database is in the  
2 form of a table.

1           37.    The article of manufacture of claim 30 wherein the code is in a form that  
2 can be rendered into a Web page.

1           38.    The article of manufacture of claim 37, wherein the form of the code is  
2 comprised of active code, wherein the active code can be executed on the client.

1           39.    The article of manufacture of claim 30, wherein the selectable interactions  
2 correspond to operations within the applications.



1           40.    The article of manufacture of claim 30, wherein the selectable interactions  
2 correspond to resources related to the applications.

1           41.    The article of manufacture of claim 40, wherein the resources are selected  
2 from the group consisting of multimedia content, objects, files, attributes of objects,  
3 program elements, database objects, table entries.

1           42.    An article of manufacture, including code for securely making available a  
2 backend application at a backend system, wherein the code is capable of causing  
3 operations, the operations comprising:  
4           creating data structures corresponding to interactions with the backend  
5 application;  
6           associating privileges for each of the data structures, wherein the privileges can be  
7 fully checked at a portal application separately hosted from the backend application;  
8           receiving a request from the portal application for reading the data structures; and  
9           sending the data structures to the portal application.

1           43.    The article of manufacture of claim 42, further comprising:  
2           receiving a request for an interaction with the backend application from the portal  
3 application;  
4           processing the request without checking for the privileges; and  
5           sending the results of processing the request to the portal server.

1           44.    The article of manufacture of claim 42, wherein the data structures are data  
2 objects.

1           45.    The article of manufacture of claim 42, wherein a representation of the  
2   data structure is from the group consisting of a relational database, an XML document  
3   and a class.

1           46.    The article of manufacture of claim 42, wherein the interactions are  
2   operations that can be performed on the backend application.

1           47.    The article of manufacture of claim 42, wherein the interactions relate to  
2   resources associated with the background application.

1           48.    An article of manufacture, including code for accessing a group of  
2   applications at a client computer, wherein the code is capable of causing operations, the  
3   operations comprising:  
4        authenticating with a portal server;  
5        receiving a list of applications and interactions that can be performed with the  
6   applications from the portal server, wherein the applications are stored at backend servers  
7   that are different from the portal server;  
8        selecting an interaction; and  
9        receiving results based on the selection of the interaction without authenticating  
10   with the backend servers.

1           49.    The article of manufacture of claim 48, wherein receiving the results  
2   further comprises receiving a set of further interactions selectable by the client.

1           50.    The article of manufacture of claim 48, wherein authenticating, receiving  
2   the list, selecting, and receiving results are at a Web browser.